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Attorney Docket No. 1832

AUG 04 2005**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

| | | | |
|-------------|-------------------------|-----------------|-----------------|
| Applicant: | Suttner et. al. | Date: | August 3, 2005 |
| Serial No.: | 10/769,208 | Group Art Unit: | 1638 |
| Filed: | January 30, 2004 | Examiner: | Anne R. Kubelik |
| For: | Soybean Variety XB53J04 | | |

Assistant Commissioner for Patents
Washington, D.C. 20231**RULE 132 DECLARATION
OF
DR. DARIA SCHMIDT**

Sir/Madam:

I, Daria Schmidt, PhD., do hereby declare and say as follows:

1. I am skilled in the art of the field of the invention. I obtained my undergraduate and Masters degrees in Plant Breeding and Plant Genetics at the University of Wisconsin – Madison in 1985 and 1987, respectively, and my doctorate in Plant Breeding and Cytogenetics with a minor in Entomology from Iowa State University in 1990. I joined Pioneer Hi-Bred in 1995 as a Research Scientists after working in private industry as a researcher in corn and soybean product development. From 1998 to 2000 I held the position of Research Coordinator. From 2000 to present, I hold the position of Research Director for Crop Genetics Technologies.

2. This declaration is in response to the Examiner's rejection under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103 as obvious over Streit et al (U.S. Patent No. 5,959,185).

3. The following table compares the two lines, XB53J04 and 95B41, by means of isozyme analysis. The two lines differ for several isozyme loci, as noted.

Appendix A

10/355,669

| Isozyme Profile for 95B41 and XB53J04 | | | | | |
|---------------------------------------|------|------|-----|------|------|
| | ACO4 | IDH2 | MDH | PGM1 | PHI1 |
| 95B41 | 3 | 2 | B | 1 | 1 |
| XB53J05 | 1 | 1 | A | 2 | 2 |

4. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: August 4, 2005By: Daria Schmidt

Daria Schmidt

Virginia Soybean Variety Evaluation Tests 1999

Tidewater Agricultural Research & Extension Center

**Virginia
Agricultural
Experiment
Station**

Table 4a. 1999 Performance of Double Crop Maturity Group IV Non Roundup Ready Entries at Blackstone Virginia

| BRAND | VARIETY | HERB. RESIST | MATURITY DATE | LODGING 1-5 | HEIGHT IN. | PSS % | SQ 1-5 | SS SEED/ LB | YIELD BU/A |
|-----------|---------------|-----------------|------------------|----------------|---------------|----------|-----------|-------------------|---------------|
| Virginia | V94-0436 | NRR | 31-Oct | 1.0 | 13.0 | 1.0 | 1.3 | 2790 | 13.1 |
| Virginia | NRR | 2-Nov | 1.0 | 14.7 | 5.3 | 1.3 | 3442 | 11.8 | |
| Virginia | V94-1295 | NRR | 31-Oct | 1.0 | 14.3 | 5.0 | 1.0 | 3350 | 11.4 |
| Virginia | V96-0332 | NRR | 26-Oct | 1.0 | 17.3 | 21.7 | 2.0 | 3063 | 11.1 |
| Virginia | V93-2329 | NRR | 29-Oct | 1.0 | 14.0 | 12.0 | 1.0 | 3520 | 9.8 |
| Deltapine | DP 4909 | NRR | 29-Oct | 1.2 | 16.3 | 4.3 | 1.3 | 2505 | 9.5 |
| Virginia | V95-1887 | NRR | 18-Oct | 1.2 | 14.3 | 6.0 | 2.0 | 2962 | 9.5 |
| Virginia | V95-0513 | NRR | 25-Oct | 1.0 | 15.0 | 2.0 | 1.3 | 3349 | 9.2 |
| Public | Manokin | NRR | 26-Oct | 1.2 | 15.7 | 6.3 | 1.0 | 3315 | 8.8 |
| Pioneer | 9482 | NRR | 20-Oct | 1.0 | 14.3 | 24.3 | 2.0 | 2725 | 8.2 |
| Virginia | V95-0596 | NRR | 30-Oct | 1.2 | 17.0 | 1.7 | 1.0 | 2766 | 8.2 |
| Virginia | V94-0552 | NRR | 2-Nov | 1.0 | 15.0 | 10.3 | 1.0 | 3484 | 7.8 |
| Deltapine | DPX 8547 | NRR | 20-Oct | 1.3 | 15.7 | 4.7 | 1.0 | 2942 | 7.5 |
| Virginia | V94-0198 | NRR | 25-Oct | 1.2 | 15.0 | 3.3 | 1.0 | 3275 | 7.5 |
| Virginia | V96-8032 | NRR | 18-Oct | 1.2 | 13.3 | 22.3 | 2.3 | 2884 | 5.9 |
| Public | Chesapeake | NRR | 22-Oct | 1.0 | 14.0 | 7.0 | 2.0 | 3011 | 5.9 |
| Public | Stressland | NRR | 15-Oct | 1.0 | 13.7 | 19.7 | 2.0 | 3158 | 5.2 |
| Virginia | V94-0189 | NRR | 19-Oct | 1.2 | 12.0 | 11.3 | 2.7 | 3191 | 3.6 |
| | GRAND MEAN | | 25-Oct | 1.1 | 14.7 | 9.4 | 1.5 | 3096 | 8.6 |
| | CV | | 0.6 | 17.5 | 11.2 | 37.1 | 22.5 | 9.3 | 21.1 |

Virginia Soybean Variety Evaluation Tests 1999

| | | | | | | | | | |
|--|-----|--|-----|-----|-----|-----|-----|-------|-----|
| | LSD | | 2.5 | 0.3 | 2.3 | 4.8 | 0.5 | 395.5 | 2.5 |
|--|-----|--|-----|-----|-----|-----|-----|-------|-----|

Table 4b. 1999 Performance of Double Crop Maturity Group IV Roundup Ready Entries at Blackstone Virginia

| BRAND | VARIETY | HERB. RESIST | MATURITY DATE | LODGING 1-5 | HEIGHT IN. | PSS % | SQ 1-5 | SS SEED/LB | YIELD BU/A |
|------------|------------|--------------|---------------|-------------|------------|-------|--------|------------|------------|
| Asgrow | AG 4301 | RR | 19-Oct | 1.2 | 13.3 | 9.3 | 2.0 | 2659 | 13.6 |
| Dekalb | CX 420 RR | RR | 18-Oct | 1.3 | 15.3 | 12.7 | 1.0 | 2851 | 13.0 |
| Pioneer | 9492 | RR | 17-Oct | 1.0 | 13.3 | 1.7 | 1.7 | 3264 | 11.6 |
| Hartz | H4998 RR | RR | 28-Oct | 1.0 | 19.7 | 3.7 | 1.7 | 3131 | 11.1 |
| Delta-King | DK4868 RR | RR | 24-Oct | 1.3 | 15.7 | 12.7 | 2.0 | 2921 | 6.7 |
| | GRAND MEAN | | 21-Oct | 1.2 | 15.5 | 8.0 | 1.7 | 2965 | 11.2 |
| | CV | | 0.8 | 18.4 | 7.5 | 37.7 | 23.2 | 7.6 | 19.8 |
| | LSD | | 3.4 | 0.3 | 1.8 | 4.6 | 0.6 | 342.0 | 3.5 |

Table 4c. 1999 Performance of Double Crop Maturity Group IV Non Roundup Ready Entries at Chesapeake Virginia

| BRAND | VARIETY | HERB. RESIST | MATURITY DATE | LODGING 1-5 | HEIGHT IN. | PSS % | SQ 1-5 | SS SEED/LB | YIELD BU/A |
|-----------|----------|--------------|---------------|-------------|------------|-------|--------|------------|------------|
| Virginia | V96-2543 | NRR | 4-Nov | 4.0 | 28.7 | 0.3 | 3.0 | 3028 | 39.4 |
| Garst | D 478 | NRR | 4-Nov | 2.8 | 36.3 | 1.3 | 2.0 | 2924 | 35.6 |
| Virginia | V94-0436 | NRR | 4-Nov | 4.0 | 30.0 | 3.0 | 3.0 | 3091 | 33.4 |
| Pioneer | 94B53 | NRR | 4-Nov | 3.2 | 37.3 | 1.3 | 2.3 | 3093 | 33.4 |
| Dekalb | CX496c | NRR | 4-Nov | 3.2 | 39.0 | 0.7 | 2.7 | 3252 | 33.1 |
| Virginia | V95-0596 | NRR | 4-Nov | 3.2 | 40.3 | 2.3 | 2.0 | 3057 | 32.3 |
| Pioneer | 9421 STS | NRR | 4-Nov | 3.8 | 35.7 | 4.3 | 2.0 | 2911 | 31.2 |
| Deltapine | DPX 8547 | NRR | 3-Nov | 4.3 | 36.7 | 2.0 | 1.0 | 2709 | 30.5 |
| Garst | D 485 | NRR | 4-Nov | 4.2 | 37.0 | 0.0 | 2.3 | 2731 | 30.3 |
| Virginia | V94-0198 | NRR | 4-Nov | 3.8 | 32.3 | 1.3 | 2.3 | 3233 | 30.3 |

Virginia Soybean Variety Evaluation Tests: 1999

| | | | | | | | | | |
|-----------|--------------|-----|-------|------|------|------|------|-------|------|
| Pioneer | 9482 | NRR | 3-Nov | 3.8 | 34.7 | 2.0 | 2.7 | 2921 | 29.1 |
| Virginia | V94-1295 | NRR | 4-Nov | 4.2 | 27.7 | 1.3 | 1.3 | 3077 | 29.1 |
| Public | Manokin | NRR | 4-Nov | 4.5 | 30.3 | 0.0 | 2.0 | 3012 | 28.9 |
| Virginia | V95-0513 | NRR | 4-Nov | 3.8 | 28.3 | 1.0 | 2.3 | 2887 | 28.6 |
| S.States | FFR-4985-STS | NRR | 4-Nov | 4.8 | 36.3 | 5.0 | 1.7 | 3228 | 26.2 |
| Deltapine | DP 4909 | NRR | 4-Nov | 3.3 | 39.0 | 1.3 | 1.7 | 2907 | 26.1 |
| Virginia | V94-0552 | NRR | 4-Nov | 4.8 | 32.5 | 4.0 | 2.0 | 3115 | 25.6 |
| Virginia | V93-2329 | NRR | 4-Nov | 4.7 | 28.0 | 4.3 | 2.0 | 2847 | 25.6 |
| Virginia | V96-0332 | NRR | 4-Nov | 4.3 | 32.3 | 2.0 | 3.0 | 3215 | 24.4 |
| Virginia | V94-0189 | NRR | 3-Nov | 4.5 | 30.3 | 1.3 | 2.7 | 2870 | 23.6 |
| Virginia | V95-1887 | NRR | 4-Nov | 4.0 | 28.0 | 2.3 | 2.0 | 2932 | 22.8 |
| Public | Stressland | NRR | 4-Nov | 4.3 | 34.3 | 3.0 | 2.0 | 3293 | 22.1 |
| Virginia | V96-8032 | NRR | 4-Nov | 4.8 | 32.3 | 3.7 | 3.3 | 2919 | 21.6 |
| Public | Chesapeake | NRR | 4-Nov | 4.7 | 31.0 | 2.7 | 3.0 | 3069 | 19.5 |
| | GRAND MEAN | | 4-Nov | 4.0 | 33.3 | 2.1 | 2.3 | 3012 | 28.5 |
| | CV | | 0.2 | 15.9 | 7.3 | 75.4 | 17.6 | 10.8 | 15.3 |
| | LSD | | 0.6 | 0.9 | 3.3 | 2.2 | 0.6 | 447.9 | 6.0 |

Table 4d. 1999 Performance of Double Crop Maturity Group IV Roundup Ready Entries at Chesapeake Virginia

| BRAND | VARIETY | HERB. RESIST | MATURITY DATE | LODGING 1-5 | HEIGHT IN. | PSS % | SQ 1-5 | SS SEED/LB | YIELD BU/A |
|---------|------------|--------------|---------------|-------------|------------|-------|--------|------------|------------|
| Asgrow | AG4301 | RR | 4-Nov | 2.5 | 35.0 | 1.7 | 3.0 | 2989 | 31.2 |
| Dekalb | CX420RR | RR | 4-Nov | 3.5 | 37.7 | 0.3 | 2.0 | 3532 | 30.0 |
| Pioneer | 94B45 | RR | 4-Nov | 3.0 | 42.3 | 0.7 | 2.7 | 3272 | 27.9 |
| Pioneer | 9492 | RR | 4-Nov | 3.2 | 35.3 | 1.0 | 2.0 | 3308 | 27.4 |
| Pioneer | 94B81 | RR | 3-Nov | 3.3 | 43.0 | 0.0 | 2.0 | 4031 | 26.1 |
| Hartz | H4998 RR | RR | 4-Nov | 3.3 | 48.3 | 3.0 | 2.3 | 2887 | 20.8 |
| | GRAND MEAN | | 3-Nov | 3.1 | 40.3 | 1.1 | 2.3 | 3336 | 27.2 |

Virginia Soybean Variety Evaluation Tests 1999

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|--|-----|--|-----|------|-----|------|------|-------|------|
| | CV | | 0.2 | 19.7 | 9.4 | 48.4 | 13.6 | 3.8 | 10.3 |
| | LSD | | 1.0 | 0.9 | 5.6 | 0.8 | 0.5 | 187.1 | 4.2 |

Table 4f. 1999 Performance of Double Crop Maturity Group IV Roundup Ready Entries at Orange Virginia

| BRAND | VARIETY | HERB. RESIST | MATURITY DATE | LODGING 1-5 | HEIGHT IN. | PSS % | SQ 1-5 | SS SEED/LB | YIELD BU/A |
|----------|---------------|--------------|---------------|-------------|------------|-------|--------|------------|------------|
| S.States | EXP-88401N-RT | RR | - | 1.0 | 15.3 | 0.0 | 1.0 | 2905 | 19.4 |
| Dekalb | CX 420 | RR | - | 1.0 | 17.0 | 1.3 | 1.0 | 3275 | 19.0 |
| Pioneer | 9492 | RR | - | 1.0 | 15.7 | 0.0 | 1.0 | 3330 | 18.0 |
| Garst | D 437 RR-N | RR | - | 1.3 | 17.3 | 1.0 | 1.3 | 3070 | 17.4 |
| Asgrow | AG 4301 | RR | - | 1.0 | 16.0 | 0.7 | 1.0 | 2930 | 17.4 |
| Pioneer | 94B81 | RR | - | 1.0 | 18.7 | 0.0 | 1.0 | 3785 | 16.7 |
| S.States | RT 446N | RR | - | 1.0 | 17.3 | 0.0 | 1.0 | 2909 | 16.4 |
| S.States | RT 447 | RR | - | 1.3 | 15.3 | 0.3 | 1.0 | 3711 | 16.0 |
| Pioneer | 94B45 | RR | - | 1.0 | 15.7 | 1.7 | 1.0 | 2990 | 16.0 |
| | GRAND MEAN | | - | 1.1 | 16.5 | 0.6 | 1.0 | 3212 | 17.4 |
| | CV | | - | 11.9 | 7.4 | 114.2 | 18.6 | 3.0 | 9.4 |
| | LSD | | - | 0.2 | 1.7 | 0.9 | 0.3 | 135.3 | 2.3 |

Table 4g. 1999 Performance of Double Crop Maturity Group IV Non Roundup Ready Entries at Painter Virginia

| BRAND | VARIETY | HERB. RESIST | MATURITY DATE | LODGING 1-5 | HEIGHT IN. | PSS % | SQ 1-5 | SS SEED/LB | YIELD BU/A |
|----------|----------|--------------|---------------|-------------|------------|-------|--------|------------|------------|
| Virginia | V96-0332 | NRR | 16-Oct | 3.2 | 27.3 | 0.7 | 1.7 | 2769 | 45.2 |
| Virginia | V96-2543 | NRR | 16-Oct | 2.3 | 25.0 | 0.7 | 2.0 | 3320 | 43.4 |
| USG | 7499 | NRR | 16-Oct | 1.7 | 28.3 | 0.0 | 1.0 | 2869 | 41.6 |
| Virginia | V94-1295 | NRR | 16-Oct | 2.0 | 23.0 | 0.3 | 1.3 | 3090 | 40.1 |

Virginia Soybean Variety Evaluation Tests 1999

| | | | | | | | | | |
|-----------|---------------|-----|--------|------|------|-----|------|-------|------|
| Virginia | V95-0513 | NRR | 16-Oct | 2.8 | 26.0 | 0.0 | 1.7 | 3206 | 38.9 |
| Deltapine | DPX 8547 | NRR | 16-Oct | 2.2 | 28.0 | 0.0 | 1.0 | 2820 | 38.8 |
| Virginia | V95-0596 | NRR | 15-Oct | 2.5 | 31.7 | 0.0 | 2.0 | 2384 | 38.4 |
| Virginia | V95-1887 | NRR | 16-Oct | 2.8 | 23.7 | 2.0 | 1.0 | 2820 | 38.1 |
| Virginia | V93-2329 | NRR | 16-Oct | 2.8 | 23.0 | 0.3 | 1.3 | 3339 | 36.8 |
| Virginia | V94-0189 | NRR | 16-Oct | 1.8 | 24.3 | 1.0 | 2.0 | 2976 | 36.4 |
| Virginia | V94-0198 | NRR | 16-Oct | 2.7 | 27.0 | 0.0 | 1.0 | 3061 | 36.3 |
| Virginia | V94-0436 | NRR | 16-Oct | 2.3 | 28.0 | 0.0 | 3.0 | 2627 | 35.2 |
| Public | Stressland | NRR | 16-Oct | 2.8 | 30.0 | 4.7 | 1.7 | 3111 | 34.1 |
| Public | Manokin | NRR | 16-Oct | 4.2 | 28.3 | 0.0 | 1.0 | 3467 | 33.2 |
| Virginia | V96-8032 | NRR | 16-Oct | 2.3 | 23.7 | 5.3 | 2.3 | 2949 | 33.1 |
| Deltapine | DP 4909 | NRR | 16-Oct | 1.5 | 27.7 | 1.3 | 2.0 | 2706 | 31.0 |
| Virginia | V94-0552 | NRR | 15-Oct | 2.7 | 23.7 | 1.0 | 1.3 | 3424 | 30.8 |
| Public | Chesapeake | NRR | 16-Oct | 2.7 | 23.7 | 1.0 | 2.3 | 3296 | 21.4 |
| | GRAND MEAN | | 15-Oct | 2.5 | 26.2 | 1.0 | 1.6 | 3013 | 36.3 |
| | CV | | 0.2 | 18.3 | 9.5 | 127 | 27.0 | 3.0 | 8.7 |
| | LSD | | 0.8 | 0.6 | 3.4 | 1.8 | 0.6 | 124.1 | 4.3 |

Table 4h. 1999 Performance of Double Crop Maturity Group IV Roundup Ready Entries at Painter Virginia

| BRAND | VARIETY | HERB. RESIST | MATURITY DATE | LODGING 1-5 | HEIGHT IN. | PSS % | SQ 1-5 | SS SEED/ LB | YIELD BU/A |
|------------|---------------|-----------------|------------------|----------------|---------------|----------|-----------|-------------------|---------------|
| Delta-King | DK4868 RR | RR | 16-Nov | 1.7 | 25.7 | 1.0 | 1.0 | 2797 | 44.3 |
| Dekalb | CX 420 RR | RR | 14-Nov | 1.5 | 26.3 | 1.7 | 1.0 | 3135 | 39.6 |
| USG | 7478nRR | RR | 16-Nov | 1.2 | 27.3 | 0.3 | 1.3 | 3103 | 38.9 |
| Hytest | HTS 4301RR | RR | 13-Nov | 1.5 | 27.7 | 1.0 | 1.7 | 2995 | 37.3 |
| Hytest | HTS 4000RR | RR | 15-Nov | 1.5 | 25.7 | 1.0 | 2.3 | 3041 | 36.6 |
| Hartz | H4998RR | RR | 16-Nov | 2.3 | 37.0 | 0.3 | 1.7 | 2823 | 36.4 |

Virginia Soybean Variety Evaluation Tests 1999

| | | | | | | | | | |
|--------|------------|----|--------|------|------|------|------|-------|------|
| Asgrow | AG 4301 | RR | 15-Nov | 1.2 | 24.7 | 2.0 | 1.7 | 2650 | 34.6 |
| | GRAND MEAN | | 15-Nov | 1.7 | 28.8 | 1.0 | 1.6 | 2918 | 38.3 |
| | CV | | 0.5 | 16.0 | 9.3 | 70.2 | 23.9 | 2.6 | 7.9 |
| | LSD | | 2.1 | 0.4 | 3.8 | 1.0 | 0.5 | 107.7 | 4.4 |

Table 4i. 1999 Performance of Double Crop Maturity Group IV Non Roundup Ready Entries at Suffolk Virginia

| BRAND | VARIETY | HERB. RESIST | MATURITY DATE | LODGING 1-5 | HEIGHT IN. | PSS % | SQ 1-5 | SS SEED/LB | YIELD BU/A |
|-----------|--------------|--------------|---------------|-------------|------------|-------|--------|------------|------------|
| Pioneer | 9482 | NRR | 2-Nov | 3.0 | 24.0 | 2.7 | 1.7 | 2726 | 32.6 |
| Virginia | V95-0596 | NRR | 2-Nov | 3.2 | 25.7 | 2.7 | 1.0 | 2276 | 32.4 |
| Virginia | V94-0198 | NRR | 5-Nov | 3.1 | 19.1 | 2.6 | 1.0 | 2845 | 31.7 |
| Virginia | V94-0436 | NRR | 2-Nov | 2.8 | 22.3 | 1.7 | 3.0 | 2401 | 31.6 |
| S.States | FFR-493 | NRR | 2-Nov | 2.7 | 22.3 | 5.3 | 2.0 | 2923 | 31.3 |
| USG | 7499 | NRR | 4-Nov | 2.7 | 23.3 | 0.7 | 1.0 | 2880 | 30.9 |
| Virginia | V94-0189 | NRR | 2-Nov | 2.3 | 16.3 | 2.3 | 2.0 | 2998 | 30.9 |
| Deltapine | DP 4909 | NRR | 4-Nov | 2.5 | 24.3 | 2.0 | 1.7 | 2678 | 30.8 |
| Dekalb | CX496c | NRR | 2-Nov | 2.2 | 21.9 | 2.8 | 1.0 | 3052 | 30.5 |
| Virginia | V94-1295 | NRR | 6-Nov | 2.5 | 19.3 | 1.7 | 1.0 | 3228 | 30.3 |
| Deltapine | DPX 8547 | NRR | 2-Nov | 3.2 | 21.7 | 2.0 | 1.0 | 2724 | 30.3 |
| Pioneer | 94B53 | NRR | 2-Nov | 3.0 | 24.3 | 5.7 | 2.0 | 2969 | 30.0 |
| Virginia | V95-0513 | NRR | 1-Nov | 3.2 | 24.7 | 2.2 | 1.0 | 3175 | 29.0 |
| Virginia | V95-1887 | NRR | 2-Nov | 2.4 | 22.7 | 2.9 | 1.0 | 2751 | 27.7 |
| Pioneer | 9421 STS | NRR | 1-Nov | 2.8 | 19.7 | 5.2 | 2.0 | 2518 | 27.3 |
| Public | Stressland | NRR | 4-Nov | 3.2 | 22.3 | 4.7 | 1.3 | 3418 | 27.3 |
| S.States | FFR 439 | NRR | 2-Nov | 2.8 | 20.0 | 3.0 | 1.7 | 2911 | 27.2 |
| S.States | FFR-4985-STs | NRR | 4-Nov | 3.7 | 22.0 | 2.7 | 1.0 | 2523 | 27.1 |
| Public | Chesapeake | NRR | 2-Nov | 3.9 | 23.2 | 1.9 | 2.0 | 3027 | 26.1 |
| Virginia | V96-8032 | NRR | 4-Nov | 3.2 | 21.7 | 8.7 | 2.0 | 2882 | 25.7 |

Virginia Soybean Variety Evaluation Tests 1999

| | | | | | | | | | |
|----------|------------|-----|-------|------|------|------|------|-------|------|
| Virginia | V93-2329 | NRR | 4-Nov | 3.0 | 20.0 | 4.0 | 1.0 | 3331 | 25.6 |
| Virginia | V94-0552 | NRR | 5-Nov | 3.0 | 22.3 | 3.5 | 1.0 | 3041 | 25.6 |
| Public | Manokin | NRR | 2-Nov | 3.2 | 21.7 | 2.7 | 1.3 | 2906 | 18.4 |
| | GRAND MEAN | | 3-Nov | 2.9 | 21.9 | 3.2 | 1.5 | 2877 | 28.7 |
| | CV | | 0.9 | 21.1 | 21.9 | 77.0 | 26.9 | 5.5 | 19.0 |
| | LSD | | 3.9 | 0.9 | 6.6 | 3.4 | 0.5 | 219.2 | 7.5 |

Table 4j. 1999 Performance of Double Crop Maturity Group IV Roundup Ready Entries at Suffolk Virginia

| BRAND | VARIETY | HERB. RESIST | MATURITY DATE | LODGING 1-5 | HEIGHT IN. | PSS % | SQ 1-5 | SS SEED/LB | YIELD BU/A |
|------------|---------------|--------------|---------------|-------------|------------|-------|--------|------------|------------|
| Delta-King | DK4868 RR | RR | 2-Nov | 2.3 | 32.3 | 2.0 | 1.0 | 2943 | 37.2 |
| S.States | RT 446N | RR | 1-Nov | 2.7 | 32.7 | 1.7 | 2.0 | 2839 | 35.2 |
| Pioneer | 9492 | RR | 2-Nov | 2.2 | 30.3 | 0.7 | 1.3 | 2979 | 34.8 |
| USG | 7478nRR | RR | 2-Nov | 2.3 | 34.3 | 0.3 | 2.0 | 3220 | 32.8 |
| S.States | EXP-88401N-RT | RR | 1-Nov | 2.0 | 29.0 | 0.7 | 1.7 | 2886 | 31.4 |
| Pioneer | 94B45 | RR | 2-Nov | 2.8 | 34.0 | 2.0 | 2.0 | 3061 | 30.9 |
| Pioneer | 94B81 | RR | 2-Nov | 2.5 | 33.3 | 1.0 | 1.0 | 3550 | 29.4 |
| S.States | RT 447 | RR | 2-Nov | 3.2 | 30.3 | 4.7 | 2.0 | 3698 | 28.1 |
| Hartz | H4998 RR | RR | 9-Nov | 3.7 | 42.7 | 2.3 | 1.7 | 2732 | 27.2 |
| | GRAND MEAN | | 2-Nov | 2.6 | 33.2 | 1.7 | 1.6 | 3101 | 31.9 |
| | CV | | 0.1 | 13.9 | 6.0 | 99.2 | 18.7 | 3.7 | 11.6 |
| | LSD | | 0.6 | 0.5 | 2.8 | 2.4 | 0.4 | 164.2 | 5.3 |

Table 4k. 1999 Performance of Double Crop Maturity Group IV Non Roundup Ready Entries at Warsaw Virginia

Virginia Soybean Variety Evaluation Tests 1999

| BRAND | VARIETY | HERB. RESIST | MATURITY DATE | LODGING 1-5 | HEIGHT IN. | PSS % | SQ 1-5 | SS SEED/LB | YIELD BU/A |
|-----------|--------------|--------------|---------------|-------------|------------|-------|--------|------------|------------|
| Garst | D 445 | NRR | 4-Nov | 1.2 | 23.7 | - | 2.7 | - | 35.5 |
| Virginia | V94-1295 | NRR | 17-Nov | 1.6 | 24.3 | - | 1.8 | - | 35.4 |
| Deltapine | DPX 8547 | NRR | 10-Nov | 2.0 | 27.3 | - | 1.6 | - | 35.1 |
| Virginia | V94-0552 | NRR | 21-Nov | 2.9 | 31.3 | - | 1.9 | - | 34.9 |
| S.States | FFR-493 | NRR | 10-Nov | 1.6 | 27.7 | - | 1.8 | - | 34.9 |
| Virginia | V94-0436 | NRR | 22-Nov | 2.3 | 29.3 | - | 2.6 | - | 34.4 |
| Virginia | V95-1887 | NRR | 11-Nov | 2.5 | 29.0 | - | 1.4 | - | 34.1 |
| Garst | D 485 | NRR | 10-Nov | 1.6 | 28.3 | - | 1.6 | - | 33.9 |
| Pioneer | 9482 | NRR | 9-Nov | 1.5 | 25.7 | - | 1.7 | - | 33.6 |
| Virginia | V95-0596 | NRR | 17-Nov | 2.0 | 30.0 | - | 1.5 | - | 33.6 |
| Virginia | V93-2329 | NRR | 15-Nov | 2.6 | 25.3 | - | 1.8 | - | 33.4 |
| USG | 7499 | NRR | 14-Nov | 1.5 | 26.7 | - | 1.4 | - | 33.3 |
| Garst | D 478 | NRR | 7-Nov | 2.3 | 27.0 | - | 1.9 | - | 33.3 |
| Deltapine | DP 4909 | NRR | 19-Nov | 1.8 | 31.0 | - | 1.7 | - | 33.2 |
| Public | Manokin | NRR | 18-Nov | 2.8 | 32.0 | - | 1.6 | - | 32.8 |
| Pioneer | 94B53 | NRR | 2-Nov | 2.2 | 27.7 | - | 2.1 | - | 32.5 |
| S.States | FFR 439 | NRR | 4-Nov | 1.9 | 28.3 | - | 2.3 | - | 32.3 |
| Virginia | V95-0513 | NRR | 14-Nov | 2.3 | 27.3 | - | 1.6 | - | 32.2 |
| Pioneer | 9421 STS | NRR | 3-Nov | 2.0 | 24.0 | - | 2.1 | - | 31.9 |
| Public | Chesapeake | NRR | 7-Nov | 1.9 | 28.0 | - | 1.7 | - | 31.5 |
| S.States | FFR-4985-STs | NRR | 21-Nov | 2.4 | 33.7 | - | 2.2 | - | 31.4 |
| Virginia | V94-0189 | NRR | 4-Nov | 1.6 | 24.0 | - | 1.9 | - | 31.2 |
| Dekalb | CX496c | NRR | 3-Nov | 2.1 | 28.3 | - | 1.7 | - | 30.7 |
| Virginia | V96-0332 | NRR | 16-Nov | 1.8 | 29.3 | - | 2.3 | - | 30.7 |
| Virginia | V94-0198 | NRR | 17-Nov | 2.5 | 30.3 | - | 1.7 | - | 30.3 |
| Virginia | V96-2543 | NRR | 12-Nov | 2.1 | 26.3 | - | 1.4 | - | 30.3 |
| Public | Stressland | NRR | 31-Oct | 1.6 | 24.0 | - | 2.0 | - | 28.7 |
| Virginia | V96-8032 | NRR | 2-Nov | 1.6 | 24.0 | - | 2.2 | - | 24.5 |

Virginia Soybean Variety Evaluation Tests 1999

| | | | | | | | | | |
|--|---------------|--|--------|------|------|---|------|---|------|
| | GRAND MEAN | | 11-Nov | 2.0 | 27.6 | - | 1.9 | - | 32.5 |
| | CV | | 0.6 | 14.0 | 6.2 | - | 12.3 | - | 10.3 |
| | LSD | | 2.4 | 0.4 | 2.3 | - | 0.3 | - | 4.6 |

Table 41. 1999 Performance of Double Crop Maturity Group IV Roundup Ready Entries at Warsaw Virginia

| BRAND | VARIETY | HERB. RESIST | MATURITY DATE | LODGING 1-5 | HEIGHT IN. | PSS % | SQ 1-5 | SS SEED/ LB | YIELD BU/A |
|----------|------------------|-----------------|------------------|----------------|---------------|----------|-----------|-------------------|---------------|
| USG | 7478nRR | RR | 6-Nov | 1.5 | 29.0 | - | 1.5 | - | 32.3 |
| Asgrow | AG 4301 | RR | 7-Nov | 1.7 | 26.3 | - | 2.1 | - | 32.2 |
| S.States | RT 446N | RR | 7-Nov | 1.7 | 28.3 | - | 1.5 | - | 31.9 |
| S.States | RT 447 | RR | 6-Nov | 1.3 | 30.3 | - | 1.8 | - | 31.3 |
| Pioneer | 9492 | RR | 7-Nov | 1.4 | 25.3 | - | 1.6 | - | 30.9 |
| Hartz | H4998 RR | RR | 23-Nov | 2.9 | 38.7 | - | 1.9 | - | 29.7 |
| S.States | EXP- 88401NRT | RR | 8-Nov | 1.4 | 22.3 | - | 1.5 | - | 29.7 |
| Pioneer | 94B45 | RR | 2-Nov | 2.0 | 28.3 | - | 2.2 | - | 29.1 |
| Garst | D 437 RR-N | RR | 4-Nov | 1.5 | 25.0 | - | 2.3 | - | 29.0 |
| Pioneer | 94B81 | RR | 5-Nov | 1.5 | 28.7 | - | 1.6 | - | 28.7 |
| Dekalb | CX 420 RR | RR | 4-Nov | 1.5 | 27.7 | - | 1.9 | - | 28.2 |
| Hystest | HTS 4301RR | RR | 5-Nov | 1.6 | 24.0 | - | 2.4 | - | 27.4 |
| Hystest | HTS 4000RR | RR | 1-Nov | 1.2 | 25.3 | - | 3.2 | - | 25.6 |
| | GRAND MEAN | | 6-Nov | 1.6 | 27.6 | - | 2.0 | - | 29.7 |
| | CV | | 0.5 | 19.7 | 7.1 | - | 10.8 | - | 6.5 |
| | LSD | | 2.0 | 0.4 | 2.7 | - | 0.3 | - | 2.7 |

Return to Virginia Soybean Variety Evaluation Tests